

**WHAT IS CLAIMED IS:**

1. A method for forming homogeneous mixture of powders of organic materials including at least one dopant component and one host component to provide a homogeneous mixture for forming a pellet for thermal physical vapor deposition producing an organic layer on a substrate for use in an organic light-emitting device, comprising:

- a) combining organic materials, such materials including at least one dopant component and one host component;
- b) providing a liquid to emulsify the organic materials;
- c) mixing the emulsified organic materials in a container to form a homogeneous mixture of organic material;
- d) heating the organic materials in a container until the liquid is evaporated and a solidified homogeneous mixture of organic materials remain;
- e) removing the solidified homogeneous mixture of organic materials from the container;
- f) pulverizing the solidified mixture of organic materials into a homogeneous mixture of organic powder; and
- g) compacting the homogenous mixture of organic powder, to form a pellet suitable for thermal physical vaporization to produce an organic layer on a substrate for use in an organic light-emitting device.

2. The method of claim 1 wherein the amount of dopant component varies between 0.1 and 20% by weight of the total weight of the mixture.

3. The method of claim 1 wherein the compaction of the homogeneous mixture of organic powder to form a pellet is compacted in a range of pressures between 3,000 and 20,000 pounds per square inch.

4. The method of claim 1 wherein the container is formed from glass or metal.

5. The method of claim 1, wherein the container includes high temperature metals Ta, W or Pt.

6. The method of claim 1, wherein the mixing includes using a ball mill, high-speed propeller, turbine blade or ultrasonication.

7. The method of claim 6, wherein the ultrasonication includes an ultrasonic horn, which operates in a range of frequencies between 10-30 kHz.